



## MEMORANDUM

To: VCP Site Manager, Northwest Region, Department of Ecology

From: Mr. Luke Martinkosky, Kane Environmental, Inc.

Date: February 4, 2013

Re: Project Background and Summary of Remedial Action  
Silverlake Unocal  
1515 112<sup>th</sup> Street SE  
Everett, Washington

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Kane Environmental, Inc. (Kane Environmental) is pleased to present this memorandum regarding petroleum products in groundwater at the gasoline service station located at 1515 112<sup>th</sup> Avenue in Everett, Washington (the Property).

### Background

The Property contains an operational gasoline service station that utilizes underground storage tanks (USTs). Kane Environmental performed a Phase I Environmental Site Assessment (ESA) on the Property in September 2010. The Property's use as a gasoline service station was considered a Recognized Environmental Condition. Kane Environmental conducted a Limited Phase II ESA in December 2010 to determine the presence or absence of petroleum hydrocarbons in soil and groundwater at the Property. Six (6) temporary soil borings were advanced on the Property. One soil sample, collected from KSB-2 (located to the south and down-slope of the USTs) contained a concentration of benzene (0.0355 milligrams per kilogram (mg/kg) that exceeded the Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A Soil Cleanup Level for Unrestricted Land Uses of 0.03 ppb. A groundwater sample collected from KSB-1 contained a benzene concentration of 6.71 micrograms per liter (ug/L), which exceeds the MTCA Method A Groundwater Cleanup Level of 5 ug/L.

On February 17, 2011 Kane Environmental installed three monitoring wells at the Property, in the vicinity of the USTs (KMW-1, KMW-2, and KMW-3). KMW-1 was installed up-slope of the

USTs and KMW-2, and KMW-3 were installed down-slope of the USTs. One soil sample, collected at 13.5-14 feet below ground surface (bgs) at KMW-2, contained a concentration of benzene (0.0466 mg/kg) that exceeded MTCA Method A Soil Cleanup Level for Unrestricted Land Uses. The groundwater samples from KMW-2 collected contained concentrations of TPH-gasoline (9,340 ug/L), benzene (240 ug/L), total xylenes (1,160 ug/L), and naphthalene (164 ug/L). The groundwater samples collected from KMW-3 collected contained concentrations of TPH-gasoline (5,330 ug/L) and benzene (48.5 ug/L). A review of the chromatograms from the analytical laboratory indicated that the petroleum hydrocarbon release had occurred recently, within one or two years of the investigation.

In order to fully delineate the petroleum hydrocarbon release Kane Environmental installed five groundwater monitoring wells (KMW-4, KMW-5, KMW-6, KMW-7, and KMW-8) to a depth of approximately 15 to 16 feet bgs on August 11, 2011 and advanced four soil borings (KSB-7, KSB-8, KSB-9, and KSB-10) on August 12, 2011. The monitoring wells were installed to the southwest of the USTs, along the southern Property boundary, and at the corners of the gasoline dispenser canopy. The soil borings were placed adjacent to the west of the USTs and along the edge of the gasoline dispenser canopy. None of the soil samples collected from the soil borings or the groundwater monitoring well borings contained concentrations of the analytes of concern that exceeded the MTCA Method A Soil Cleanup Level for Unrestricted Land Uses. Groundwater samples were collected from all of the groundwater monitoring wells on the Property. Only groundwater samples collected from KMW-2 and KMW-3 contained concentrations of the analytes of concern that exceeded the MTCA Method A Groundwater Cleanup Levels. Groundwater samples from KMW-2 contained concentrations of TPH-Gasoline (13,000 ug/L), Benzene (39 ug/L), and Naphthalenes (403 ug/L) that exceeded the MTCA Method A Groundwater Cleanup Levels. Groundwater samples from KMW-3 contained concentrations of TPH-Gasoline (8,500 ug/L), Benzene (18 ug/L) and Naphthalenes (200 ug/L) that exceeded the MTCA Method A Groundwater Cleanup Levels.

An Underground Storage Tank Tightness Testing Checklist prepared by SME Solutions and dated August 5, 2011, stated that one of the UST overfill buckets was "broken". Telephone conversations with the inspector, Mr. Brian Fite of SME Solutions, revealed that the overfill was cracked on the premium grade UST, providing a direct pathway for gasoline to enter the

subsurface through the pea gravel fill around the southern end of the UST and migrating into the subsurface soil and groundwater.

## **Remedial Action**

The area of soil contamination at the Property was determined to be limited to the area of the USTs and KMW-2 and KSB-2 (shown on Figure 3). The petroleum contaminated groundwater plume was determined to be limited in extent to the area around KMW-2 and KMW-3 (shown on Figure 4).

Kane Environmental conducted a remedial action that consisted of removing contaminated groundwater from monitoring wells KMW-2 and KMW-3 using a vacuum truck. Within two weeks of removal of contaminated groundwater, groundwater samples from KMW-2 and KMW-3 were collected and analyzed for TPH as volatile range (equivalent to TPH as gasoline), benzene, toluene, ethylbenzene, and xylenes (BTEX).

Groundwater removal was accomplished by inserting one-inch PVC pipe to the base of the monitoring well. The PVC pipe was connected to flexible hose running from a vacuum truck. Prior to beginning remedial action monitoring wells KMW-2 and KMW-3 were sampled to provide a contaminant concentration baseline for comparison to measure the effectiveness of the remedial action.

Three hundred gallons of groundwater was removed on December 1, 2011; 90 gallons of groundwater was removed on February 3, 2012; and 107 gallons of groundwater was removed on March 30, 2012. The minimum suction to achieve removal of groundwater was used, however each well was vacuumed dry. The wells were allowed to recharge and then groundwater was removed, this process was repeated for up to six hours.

Initial concentrations of TPH volatile range and benzene exceeded their respective MTCA Method A Cleanup Levels (CULs) in both wells (Table 1), following the first remedial event, the only contaminant exceeding the CULS was TPH volatile range in KMW-2. The contaminant concentrations continued to decline after each remedial event, see Exhibit 1 for graphs showing the decrease in contaminant concentrations. Analytical laboratory results are included as Attachment A.

## **Ongoing Groundwater Monitoring**

Following completion of the remedial action, quarterly groundwater monitoring was instituted at the Property and is ongoing.

In September 2012, Kane Environmental was contacted by the City of Everett. According to Ms. Barbara Hardman, Real Property Manager for the City of Everett, two of the monitoring wells associated with the Property (KMW-4 and KMW-5) were within a planned expansion of the right-of-way for the 112<sup>th</sup> Street Widening Project (No. 3256). Kane Environmental was informed that these two monitoring wells were in the location of the future street gutter, therefore Kane Environmental was instructed by Colony Insurance to decommission the wells and replace them with two additional monitoring wells (KMW-9 and KMW-10). Due to site constraints (overhead and underground utilities), KMW-9 was installed to the west of KMW-3.

### **FIGURES**

- Figure 1 – Vicinity Map
- Figure 2 – Site Plan
- Figure 3 – Contaminated Soil Extents Map
- Figure 4 – Contaminated Groundwater Extents Map

### **TABLES**

- Table 1 – Summary of Petroleum Products in Groundwater

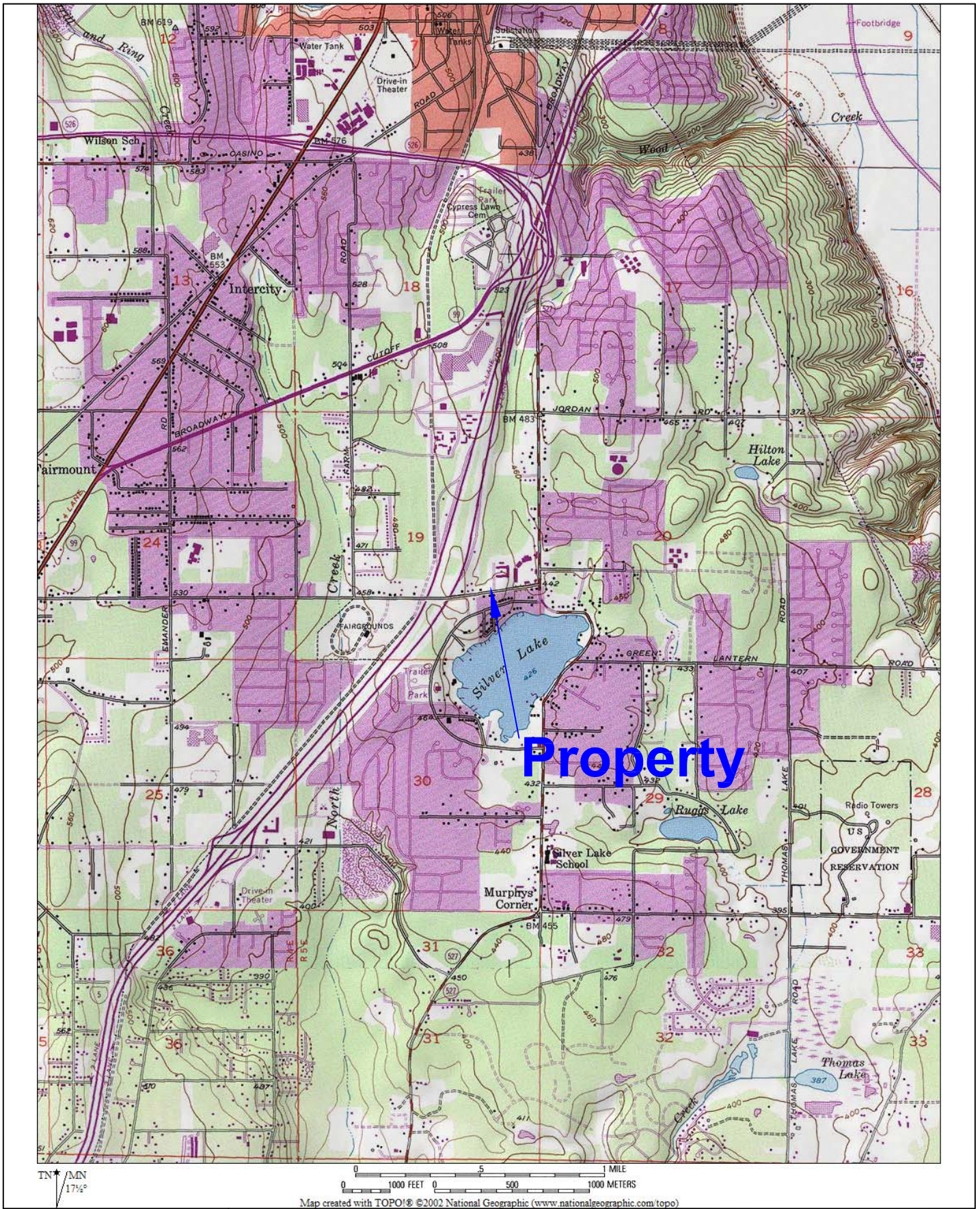
### **EXHIBITS**

- Exhibit 1 – Gasoline and Benzene Concentration Trends

### **ATTACHMENTS**

- Attachment A – Laboratory Analytical Package
-

## FIGURES



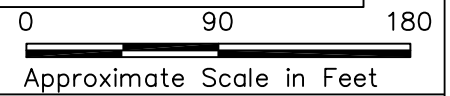
Remedial Action Summary  
 1515 112th Street Southeast  
 Everett, Washington

Figure 1  
 Vicinity Map



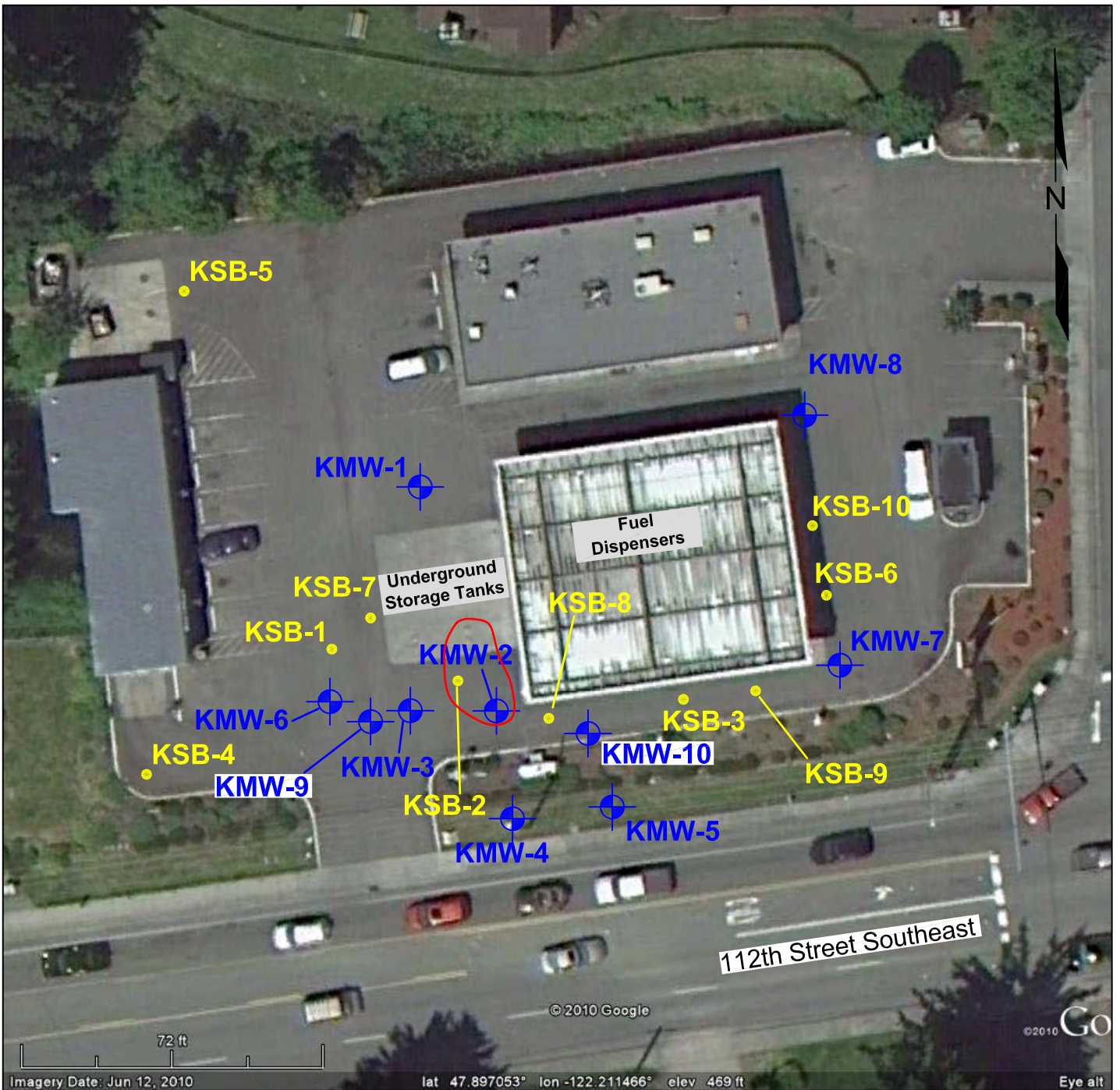
LEGEND

— Approximate Property Boundary



Remedial Action Summary  
 1515 112th Street Southeast  
 Everett, Washington

Figure 2  
 Site Plan



LEGEND



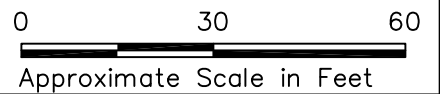
Location of Monitoring Well



Location of Soil Boring

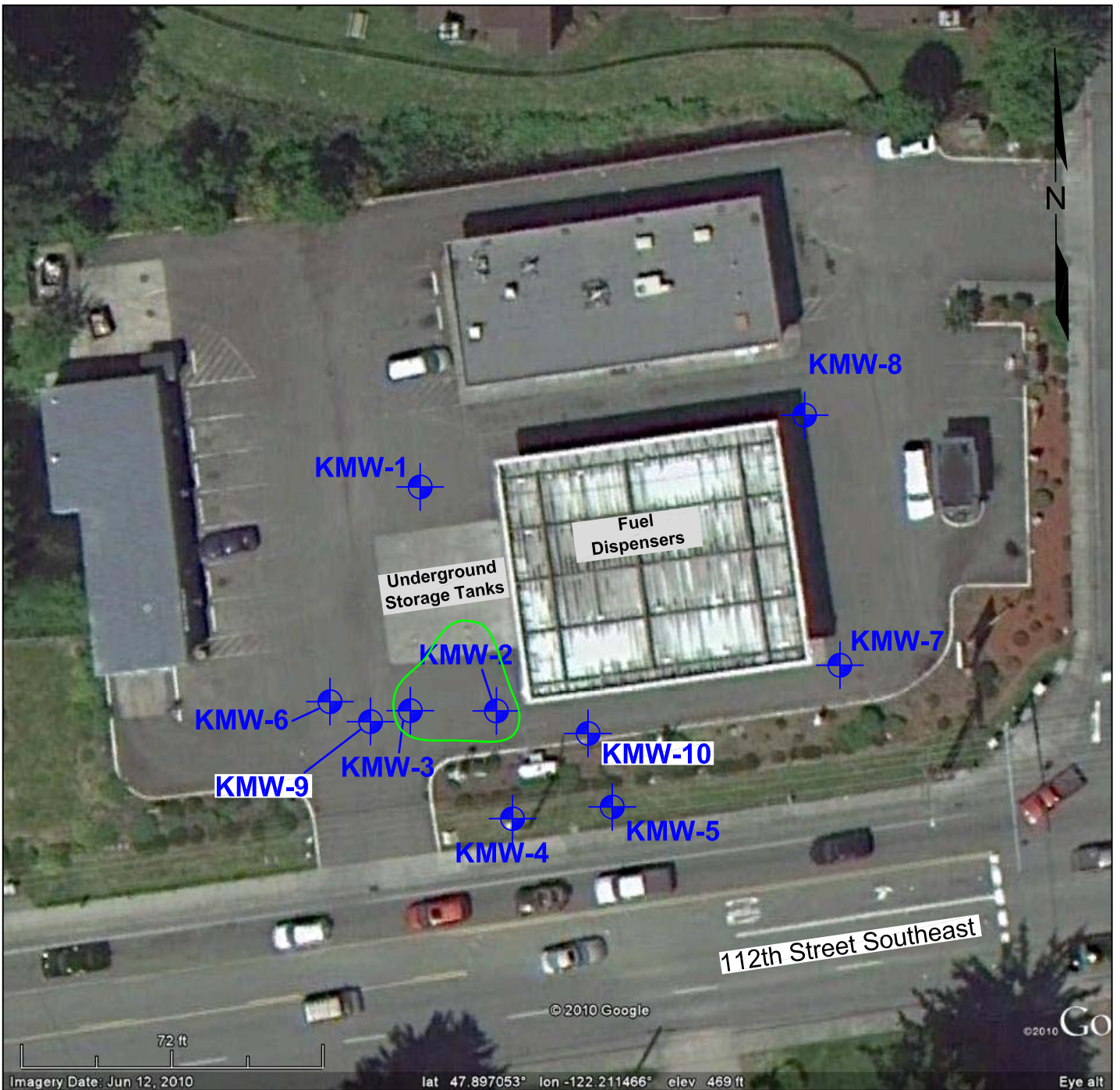


Approximate Extent of Previous Petroleum Contaminated Soil



Remedial Action Summary  
1515 112th Street Southeast  
Everett, Washington

Figure 3  
Approximate Extents of  
Previous Soil Contamination



*LEGEND*



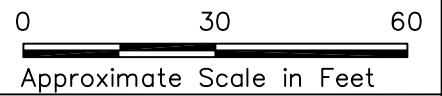
Location of Monitoring Well



Location of Soil Boring



Approximate Extent of Previous  
Petroleum Contaminated  
Groundwater



Remedial Action Summary  
1515 112th Street Southeast  
Everett, Washington

Figure 4  
Approximate Extents of  
Previous Groundwater  
Contamination

## **TABLES**

**Table 1**  
**Summary of Petroleum Products in Groundwater**  
**Silverlake 76/Texaco**  
**1515 112th Street SE**  
**Everett, Washington**

Sample ID	Sample Date	TPH-Volatile Range	Benzene	Toluene	Ethylbenzene	Total Xylenes
		µg/L	µg/L	µg/L	µg/L	µg/L
KMW-2	8/22/2011	<b>13000</b>	<b>39</b>	3.2	440	950
KMW-3	8/23/2011	<b>8500</b>	<b>18</b>	4	200	450
Remedial well pumping, 12/1/11						
KMW-2	12/7/2011	<b>2000</b>	3.4	nd	28	55
KMW-3	12/7/2011	340	nd	nd	1.6	nd
Remedial well pumping, 2/3/12						
KMW-2	2/13/2012	440	nd	nd	8.4	nd
KMW-3	2/13/2012	nd	nd	nd	nd	nd
Remedial well pumping, 3/29/12						
KMW-2	4/9/2012	nd	nd	nd	nd	nd
KMW-3	4/9/2012	nd	nd	nd	nd	nd
<i>Method Reporting Limit</i>		50	1.0	1.0	1.0	3.0
<i>MTCA Method A Cleanup Level for Groundwater</i>		800 <sup>a</sup> /1,000	5	1000	700	1000

**Notes:**

µg/L = micrograms per liter (equivalent to parts per billion)

– = Not analyzed.

Shaded and Bold concentrations are above MTCA Method A Cleanup Level for Unrestricted Land Use.

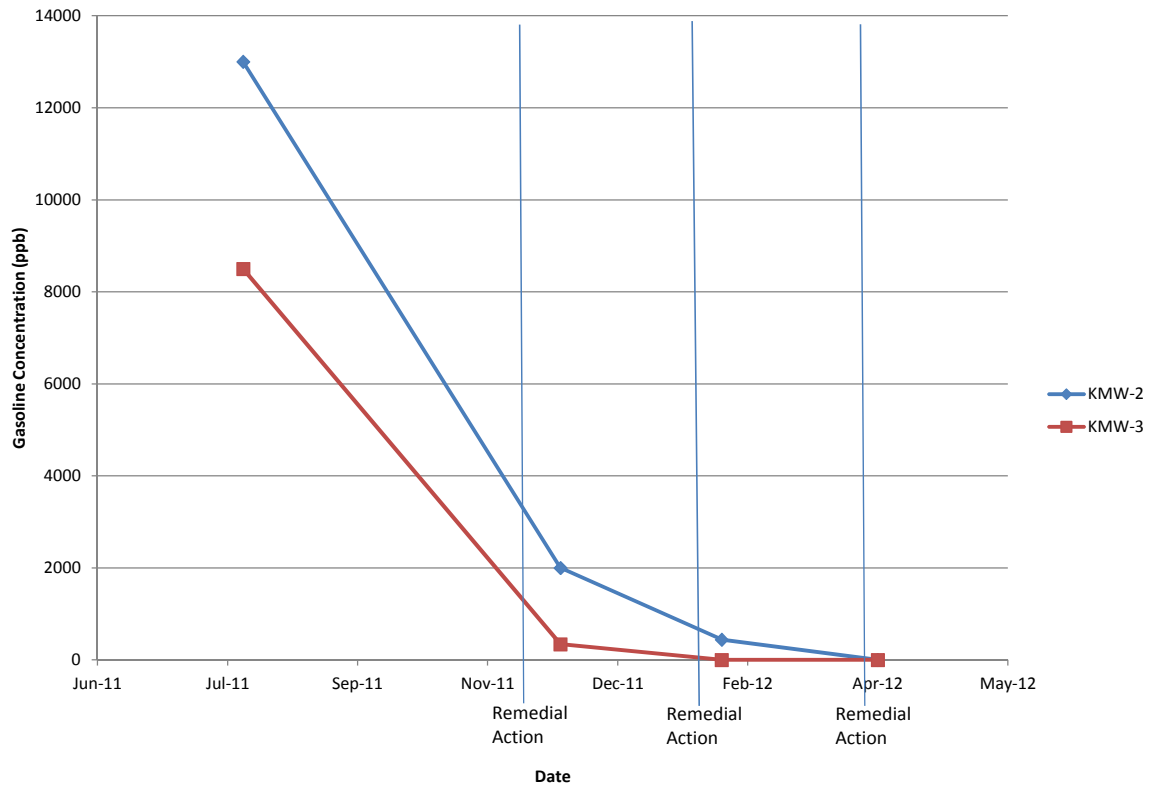
a = Cleanup level used if benzene is present or total of ethylbenzene, toluene and xylenes is greater than 1% of gasoline mixture.

nd = not detected at Method Reporting Limit

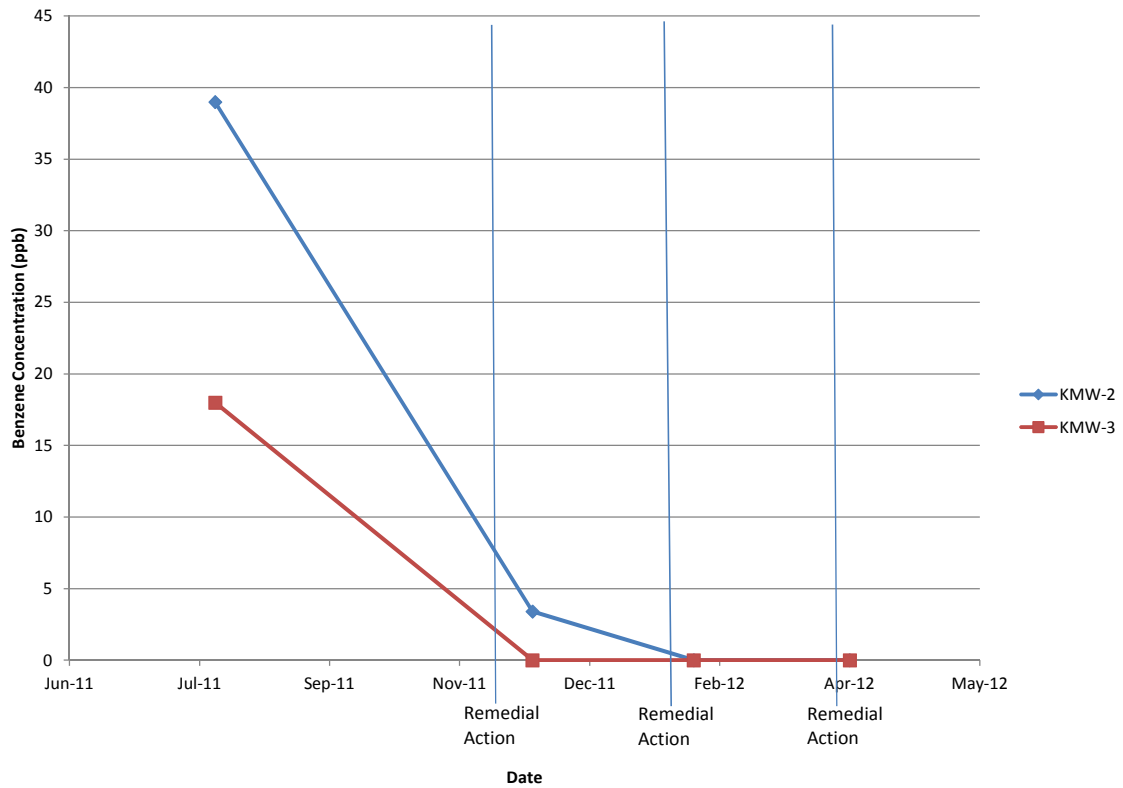
\* = Sample had higher reporting limits than those shown. See analytical data for reporting limits.

**EXHIBIT 1**  
**CONCENTRATION GRAPHS**

### Exhibit 1 - Gasoline Concentration in Wells



### Exhibit 1 - Benzene Concentration in Wells



**ATTACHMENT A  
LABORATORY ANALYTICAL PACKAGE**



December 9, 2011

Mr. Luke Martinkosky  
Kane Environmental, Inc.  
3815 Woodland Park Ave N., Suite 102  
Seattle, WA 98103

Dear Mr. Martinkosky,

On December 7th, 2 samples were received by our laboratory and assigned our laboratory project number 1112043. The project was identified as your Silver Lake 76/Texaco. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan  
Laboratory Director



CERTIFICATE OF ANALYSIS

CLIENT: Kane Environmental, Inc. DATE: 12/9/2011  
3815 Woodland Park Ave N., Suite ALS JOB#: 1112043  
102 ALS SAMPLE#: -01  
Seattle, WA 98103  
CLIENT CONTACT: Luke Martinkosky DATE RECEIVED: 12/7/2011  
CLIENT PROJECT: Silver Lake 76/Texaco COLLECTION DATE: 12/7/2011 12:02  
CLIENT SAMPLE ID: KMW-2 WDOE ACCREDITATION: C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	2000	100	2	UG/L	12/08/2011	DLC
Benzene	EPA-8021	3.4	1.0	1	UG/L	12/08/2011	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/08/2011	DLC
Ethylbenzene	EPA-8021	28	1.0	1	UG/L	12/08/2011	DLC
Xylenes	EPA-8021	55	3.0	1	UG/L	12/08/2011	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 2X Dilution	NWTPH-GX	109	12/08/2011	DLC
TFT	EPA-8021	87.1	12/08/2011	DLC

U - Analyte analyzed for but not detected at level above reporting limit.  
Chromatogram indicates that it is likely that sample contains highly weathered gasoline.



CERTIFICATE OF ANALYSIS

CLIENT: Kane Environmental, Inc.  
3815 Woodland Park Ave N., Suite  
102  
Seattle, WA 98103

DATE: 12/9/2011  
ALS JOB#: 1112043  
ALS SAMPLE#: -02

CLIENT CONTACT: Luke Martinkosky  
CLIENT PROJECT: Silver Lake 76/Texaco  
CLIENT SAMPLE ID: KMW-3

DATE RECEIVED: 12/7/2011  
COLLECTION DATE: 12/7/2011 12:28  
WDOE ACCREDITATION: C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	340	50	1	UG/L	12/08/2011	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	12/08/2011	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/08/2011	DLC
Ethylbenzene	EPA-8021	1.6	1.0	1	UG/L	12/08/2011	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	12/08/2011	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	94.1	12/08/2011	DLC
TFT	EPA-8021	95.3	12/08/2011	DLC

U - Analyte analyzed for but not detected at level above reporting limit.  
Chromatogram indicates that it is likely that sample contains highly weathered gasoline.



CERTIFICATE OF ANALYSIS

CLIENT: Kane Environmental, Inc. DATE: 12/9/2011  
3815 Woodland Park Ave N., Suite ALS SDG#: 1112043  
102 WDOE ACCREDITATION: C601  
Seattle, WA 98103  
CLIENT CONTACT: Luke Martinkosky  
CLIENT PROJECT: Silver Lake 76/Texaco

LABORATORY BLANK RESULTS

**MBG-120211W - Batch 2342 - Water by NWTPH-GX**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	12/02/2011	DLC

**MB-120211W - Batch 2342 - Water by EPA-8021**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	12/02/2011	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	12/02/2011	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	12/02/2011	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	12/02/2011	DLC



CERTIFICATE OF ANALYSIS

CLIENT: Kane Environmental, Inc. DATE: 12/9/2011
3815 Woodland Park Ave N., Suite ALS SDG#: 1112043
102 WDOE ACCREDITATION: C601
Seattle, WA 98103
CLIENT CONTACT: Luke Martinkosky
CLIENT PROJECT: Silver Lake 76/Texaco

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 2342 - Water by NWTPH-GX

Table with 7 columns: SPIKED COMPOUND, METHOD, %REC, RPD, QUAL, ANALYSIS DATE, ANALYSIS BY. Row 1: TPH-Volatile Range - BSD, NWTPH-GX, 65.3, 0, QUAL, 12/02/2011, DLC

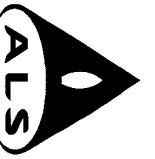
ALS Test Batch ID: 2342 - Water by EPA-8021

Table with 7 columns: SPIKED COMPOUND, METHOD, %REC, RPD, QUAL, ANALYSIS DATE, ANALYSIS BY. Rows include Benzene - BS, Benzene - BSD, Toluene - BS, Toluene - BSD, Ethylbenzene - BS, Ethylbenzene - BSD, Xylenes - BS, Xylenes - BSD.

APPROVED BY

Handwritten signature of Paul Bagum

Laboratory Director



**ALS Environmental**  
 8620 Holly Drive, Suite 100  
 Everett, WA 98208  
 Phone (425) 356-2600  
 (206) 292-9059 Seattle  
 (425) 356-2626 Fax  
 http://www.alsglobal.com

**Chain Of Custody/  
 Laboratory Analysis Request**

ALS Job # \_\_\_\_\_ (Laboratory Use Only)  
 11/20/03

Date \_\_\_\_\_ Page \_\_\_\_\_ Of \_\_\_\_\_

PROJECT ID: <del>54004</del> Silverlake 76/Teraco				ANALYSIS REQUESTED												OTHER (Specify)	
REPORT TO COMPANY: Kane Environmental				NWTPH-HCID													
PROJECT MANAGER: Luke Martinkosky				NWTPH-DX													
ADDRESS: 3815 Woodland Park Aren, Suite 102 Seattle WA 98103				NWTPH-GX													
PHONE: 206-691-0476 FAX:				BTEX by EPA-8021													
PO NUMBER: 54004 E-MAIL: Luke @ Kane-env				MTBE by EPA-8021 <input type="checkbox"/> EPA-8260 <input type="checkbox"/>													
INVOICE TO COMPANY: Colony Insurance				Halogenated Volatiles by EPA 8260													
ATTENTION: Carol Lybeer				Volatile Organic Compounds by EPA 8260													
ADDRESS:				EDB / EDC by EPA 8260 SIM (water)													
SAMPLE I.D.				EDB / EDC by EPA 8260 (soil)													
DATE				Semivolatile Organic Compounds by EPA 8270													
TIME				Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM <input type="checkbox"/>													
TYPE				PCB <input type="checkbox"/> Pesticides <input type="checkbox"/> by EPA 8081/8082													
LAB #				Metals-MTCA-5 <input type="checkbox"/> RCRA-8 <input type="checkbox"/> Pri Pol <input type="checkbox"/> TAL <input type="checkbox"/>													
1. KMW-2				Metals Other (Specify)													
2. KMW-3				TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs <input type="checkbox"/>													
3.				NUMBER OF CONTAINERS													
4.				RECEIVED IN GOOD CONDITION?													
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

**SPECIAL INSTRUCTIONS**

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Roxanne Russell, Kane Environmental, 12/2/11, 1:15pm

Received By: Mallory Grant, ALS, 12/2/11, 1:15pm

2. Relinquished By:

Received By:

12/2/11, 1:15pm

TURNAROUND REQUESTED in Business Days\*  
 OTHER:

Organic, Metals & Inorganic Analysis

10  5  3  2  1

Fuels & Hydrocarbon Analysis

5  3  1

Specify:

\* Turnaround request less than standard may incur Rush Charges



April 9, 2012

Mr. Luke Martinkosky  
Kane Environmental, Inc.  
3815 Woodland Park Ave N., Suite 102  
Seattle, WA 98103

Dear Mr. Martinkosky,

On April 6th, 3 samples were received by our laboratory and assigned our laboratory project number EV12040034. The project was identified as your Silver Lake. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan  
Laboratory Director



**CERTIFICATE OF ANALYSIS**

CLIENT: Kane Environmental, Inc.  
 3815 Woodland Park Ave N., Suite  
 102  
 Seattle, WA 98103

CLIENT CONTACT: Luke Martinkosky  
 CLIENT PROJECT: Silver Lake  
 CLIENT SAMPLE ID: KMW-2

DATE: 4/9/2012  
 ALS JOB#: EV12040034  
 ALS SAMPLE#: -01

DATE RECEIVED: 4/6/2012  
 COLLECTION DATE: 4/6/2012 11:25:00 AM  
 WDOE ACCREDITATION: C601

**DATA RESULTS**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	04/09/2012	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	04/09/2012	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	04/09/2012	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	04/09/2012	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	04/09/2012	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	94.3	04/09/2012	DLC
TFT	EPA-8021	97.5	04/09/2012	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



**CERTIFICATE OF ANALYSIS**

<b>CLIENT:</b>	Kane Environmental, Inc. 3815 Woodland Park Ave N., Suite 102 Seattle, WA 98103	<b>DATE:</b>	4/9/2012
<b>CLIENT CONTACT:</b>	Luke Martinkosky	<b>ALS JOB#:</b>	EV12040034
<b>CLIENT PROJECT:</b>	Silver Lake	<b>ALS SAMPLE#:</b>	-02
<b>CLIENT SAMPLE ID</b>	KMW-3	<b>DATE RECEIVED:</b>	4/6/2012
		<b>COLLECTION DATE:</b>	4/6/2012 11:55:00 AM
		<b>WDOE ACCREDITATION:</b>	C601

**DATA RESULTS**

<b>ANALYTE</b>	<b>METHOD</b>	<b>RESULTS</b>	<b>REPORTING LIMITS</b>	<b>DILUTION FACTOR</b>	<b>UNITS</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	04/09/2012	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	04/09/2012	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	04/09/2012	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	04/09/2012	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	04/09/2012	DLC

<b>SURROGATE</b>	<b>METHOD</b>	<b>%REC</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
TFT	NWTPH-GX	<b>104</b>	04/09/2012	DLC
TFT	EPA-8021	<b>105</b>	04/09/2012	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



**CERTIFICATE OF ANALYSIS**

<b>CLIENT:</b>	Kane Environmental, Inc. 3815 Woodland Park Ave N., Suite 102 Seattle, WA 98103	<b>DATE:</b>	4/9/2012
<b>CLIENT CONTACT:</b>	Luke Martinkosky	<b>ALS JOB#:</b>	EV12040034
<b>CLIENT PROJECT:</b>	Silver Lake	<b>ALS SAMPLE#:</b>	-03
<b>CLIENT SAMPLE ID</b>	Trip Blank	<b>DATE RECEIVED:</b>	4/6/2012
		<b>COLLECTION DATE:</b>	4/6/2012 12:00:00 PM
		<b>WDOE ACCREDITATION:</b>	C601

**DATA RESULTS**

<b>ANALYTE</b>	<b>METHOD</b>	<b>RESULTS</b>	<b>REPORTING LIMITS</b>	<b>DILUTION FACTOR</b>	<b>UNITS</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	04/09/2012	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	04/09/2012	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	04/09/2012	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	04/09/2012	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	04/09/2012	DLC

<b>SURROGATE</b>	<b>METHOD</b>	<b>%REC</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
TFT	NWTPH-GX	<b>116</b>	04/09/2012	DLC
TFT	EPA-8021	<b>103</b>	04/09/2012	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



**CERTIFICATE OF ANALYSIS**

CLIENT:	Kane Environmental, Inc. 3815 Woodland Park Ave N., Suite 102 Seattle, WA 98103	DATE:	4/9/2012
CLIENT CONTACT:	Luke Martinkosky	ALS SDG#:	EV12040034
CLIENT PROJECT:	Silver Lake	WDOE ACCREDITATION:	C601

**LABORATORY BLANK RESULTS**

**MBG-040612W - Batch 2652 - Water by NWTPH-GX**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	04/06/2012	DLC

**MB-040612W - Batch 2652 - Water by EPA-8021**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	04/06/2012	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	04/06/2012	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	04/06/2012	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	04/06/2012	DLC



CERTIFICATE OF ANALYSIS

CLIENT: Kane Environmental, Inc.
3815 Woodland Park Ave N., Suite 102
Seattle, WA 98103

DATE: 4/9/2012
ALS SDG#: EV12040034
WDOE ACCREDITATION: C601

CLIENT CONTACT: Luke Martinkosky
CLIENT PROJECT: Silver Lake

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 2652 - Water by NWTPH-GX

Table with 7 columns: SPIKED COMPOUND, METHOD, %REC, RPD, QUAL, ANALYSIS DATE, ANALYSIS BY. Rows include TPH-Volatile Range - BS and TPH-Volatile Range - BSD.

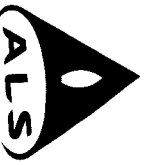
ALS Test Batch ID: 2652 - Water by EPA-8021

Table with 7 columns: SPIKED COMPOUND, METHOD, %REC, RPD, QUAL, ANALYSIS DATE, ANALYSIS BY. Rows include Benzene - BS, Benzene - BSD, Toluene - BS, Toluene - BSD, Ethylbenzene - BS, Ethylbenzene - BSD, Xylenes - BS, and Xylenes - BSD.

APPROVED BY

Handwritten signature of Paul Bagum

Laboratory Director



**ALS Environmental**  
 8620 Holly Drive, Suite 100  
 Everett, WA 98208  
 Phone (425) 356-2600  
 (425) 356-2626 Fax  
 http://www.alsglobal.com

# Chain Of Custody/ Laboratory Analysis Request

ALS User: **EV12040034**

Date **4-6-12** Page **1** of **1**

PROJECT ID: <b>Silver Lake</b>				ANALYSIS REQUESTED				OTHER (Specify)			
REPORT TO COMPANY: <b>Kane Environ Mental</b>				NWTPH-HCID							
PROJECT MANAGER: <b>Luke Martinovsky / John Kane</b>				NWTPH-DX							
ADDRESS: <b>3815 Woodland PK Ave N, #102 Seattle, WA 98103</b>				NWTPH-GX							
PHONE: <b>206-691-0476</b> FAX: <b>John Kane - Environ Mental.com</b>				BTEX by EPA-8021							
P.O. NUMBER: <b>54004</b> EMAIL: <b>luke@kane-environmental.com</b>				MTBE by EPA-8021 <input type="checkbox"/> EPA-8260 <input type="checkbox"/>							
INVOICE TO COMPANY: <b>Colony Insurance</b>				Halogenated Volatiles by EPA 8260							
ATTENTION: <b>Carol Lybeer</b>				Volatile Organic Compounds by EPA 8260							
ADDRESS:				EDB / EDC by EPA 8260 SIM (water)							
SAMPLE I.D.				EDB / EDC by EPA 8260 (soil)							
DATE				Semivolatile Organic Compounds by EPA 8270							
TIME				Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM <input type="checkbox"/>							
TYPE				PCB <input type="checkbox"/> Pesticides <input type="checkbox"/> by EPA 8081/8082							
LAB#				Metals-MTCA-5 <input type="checkbox"/> RCRA-8 <input type="checkbox"/> Pri Pol <input type="checkbox"/> TAL <input type="checkbox"/>							
				Metals Other (Specify)							
				TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs <input type="checkbox"/>							
				NUMBER OF CONTAINERS							
				RECEIVED IN GOOD CONDITION?							

**SPECIAL INSTRUCTIONS**

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: **Samir Momeni** **4-6-12 12:40**

Received By: **Shawn Evans** **4/6/12 12:40**

2. Relinquished By:

Received By:

Organic, Metals & Inorganic Analysis

Standard  10  5  3  2  1  SAME DAY

Fuels & Hydrocarbon Analysis

Standard  3  1  SAME DAY

TURNAROUND REQUESTED in Business Days\*

Specify: \_\_\_\_\_ OTHER: \_\_\_\_\_

\* Turnaround request less than standard may incur Rush Charges

LABORATORY COPY



February 14, 2012

Mr. Luke Martinkosky  
Kane Environmental, Inc.  
3815 Woodland Park Ave N., Suite 102  
Seattle, WA 98103

Dear Mr. Martinkosky,

On February 13th, 2 samples were received by our laboratory and assigned our laboratory project number 1202072. The project was identified as your Silver Lake 76/Texaco. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan  
Laboratory Director



**CERTIFICATE OF ANALYSIS**

CLIENT:	Kane Environmental, Inc. 3815 Woodland Park Ave N., Suite 102 Seattle, WA 98103	DATE:	2/14/2012
		ALS JOB#:	1202072
		ALS SAMPLE#:	-01
CLIENT CONTACT:	Luke Martinkosky	DATE RECEIVED:	2/13/2012
CLIENT PROJECT:	Silver Lake 76/Texaco	COLLECTION DATE:	2/13/2012 11:50
CLIENT SAMPLE ID	KMW-2	WDOE ACCREDITATION:	C601

**DATA RESULTS**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	<b>440</b>	50	1	UG/L	02/13/2012	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	02/13/2012	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	02/13/2012	DLC
Ethylbenzene	EPA-8021	<b>8.4</b>	1.0	1	UG/L	02/13/2012	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	02/13/2012	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	<b>75.7</b>	02/13/2012	DLC
TFT	EPA-8021	<b>93.3</b>	02/13/2012	DLC

U - Analyte analyzed for but not detected at level above reporting limit.  
Chromatogram indicates that it is likely that sample contains highly weathered gasoline.



**CERTIFICATE OF ANALYSIS**

CLIENT: Kane Environmental, Inc.  
 3815 Woodland Park Ave N., Suite  
 102  
 Seattle, WA 98103

DATE: 2/14/2012  
 ALS JOB#: 1202072  
 ALS SAMPLE#: -02

CLIENT CONTACT: Luke Martinkosky  
 CLIENT PROJECT: Silver Lake 76/Texaco  
 CLIENT SAMPLE ID: KMW-3

DATE RECEIVED: 2/13/2012  
 COLLECTION DATE: 2/13/2012 12:15  
 WDOE ACCREDITATION: C601

**DATA RESULTS**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	02/13/2012	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	02/13/2012	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	02/13/2012	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	02/13/2012	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	02/13/2012	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	82.4	02/13/2012	DLC
TFT	EPA-8021	93.5	02/13/2012	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Kane Environmental, Inc. DATE: 2/14/2012  
3815 Woodland Park Ave N., Suite ALS SDG#: 1202072  
102 WDOE ACCREDITATION: C601  
Seattle, WA 98103  
CLIENT CONTACT: Luke Martinkosky  
CLIENT PROJECT: Silver Lake 76/Texaco

LABORATORY BLANK RESULTS

**MBG-020912W - Batch 2496 - Water by NWTPH-GX**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	02/09/2012	DLC

**MB-020912W - Batch 2496 - Water by EPA-8021**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	02/09/2012	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	02/09/2012	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	02/09/2012	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	02/09/2012	DLC



CERTIFICATE OF ANALYSIS

CLIENT: Kane Environmental, Inc. DATE: 2/14/2012
3815 Woodland Park Ave N., Suite ALS SDG#: 1202072
102 WDOE ACCREDITATION: C601
Seattle, WA 98103
CLIENT CONTACT: Luke Martinkosky
CLIENT PROJECT: Silver Lake 76/Texaco

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 2496 - Water by NWTPH-GX

Table with 7 columns: SPIKED COMPOUND, METHOD, %REC, RPD, QUAL, ANALYSIS DATE, ANALYSIS BY. Rows include TPH-Volatile Range - BS and TPH-Volatile Range - BSD.

ALS Test Batch ID: 2496 - Water by EPA-8021

Table with 7 columns: SPIKED COMPOUND, METHOD, %REC, RPD, QUAL, ANALYSIS DATE, ANALYSIS BY. Rows include Benzene - BS, Benzene - BSD, Toluene - BS, Toluene - BSD, Ethylbenzene - BS, Ethylbenzene - BSD, Xylenes - BS, and Xylenes - BSD.

APPROVED BY

Handwritten signature of Paul Bagum

Laboratory Director



**ALS Environmental**  
 8620 Holly Drive, Suite 100  
 Everett, WA 98208  
 Phone (425) 356-2600  
 (206) 292-9059 Seattle  
 (425) 356-2626 Fax  
 http://www.alsglobal.com

# Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only)  
 1202072

Date \_\_\_\_\_ Page \_\_\_\_\_ Of \_\_\_\_\_

PROJECT ID: <u>Silver Lake 76/Texaco</u>				ANALYSIS REQUESTED												OTHER (Specify)	
REPORT TO COMPANY: <u>Kane Environmental</u>				NWTPH-HCID													
PROJECT MANAGER: <u>Luke Martin Kosky</u>				NWTPH-DX													
ADDRESS: <u>3815 Woodland Park Ave N, Suite 102</u> <u>Seattle WA 98103</u>				NWTPH-GX													
PHONE: <u>206-691-0476</u> FAX: _____				BTEX by EPA-8021													
P.O. NUMBER: <u>54004</u> E-MAIL: <u>Luke@Kane-Environmental.com</u>				MTBE by EPA-8021 <input type="checkbox"/> EPA-8260 <input type="checkbox"/>													
INVOICE TO COMPANY: <u>Colony Insurance</u>				Halogenated Volatiles by EPA 8260													
ATTENTION: <u>Caryl Lybeer</u>				Volatile Organic Compounds by EPA 8260													
ADDRESS: _____				EDB / EDC by EPA 8260 SIM (water)													
SAMPLE I.D.				EDB / EDC by EPA 8260 (soil)													
DATE				Semivolatile Organic Compounds by EPA 8270													
TIME				Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM <input type="checkbox"/>													
TYPE				PCB <input type="checkbox"/> Pesticides <input type="checkbox"/> by EPA 8081/8082													
LAB #				Metals-MTCA-5 <input type="checkbox"/> RCRA-8 <input type="checkbox"/> Pri Pol <input type="checkbox"/> TAL <input type="checkbox"/>													
				Metals Other (Specify)													
				TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs <input type="checkbox"/>													
1. <u>KMMW-2</u>				<input checked="" type="checkbox"/>												3	
2. <u>KMMW-3</u>				<input checked="" type="checkbox"/>												3	
3. _____																	
4. _____																	
5. _____																	
6. _____																	
7. _____																	
8. _____																	
9. _____																	
10. _____																	
				NUMBER OF CONTAINERS													
				RECEIVED IN GOOD CONDITION?													

LABORATORY COPY

**SPECIAL INSTRUCTIONS**

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Kayanne Russell, 2/13/12, 1313

Received By: Shawn Robus ALS 2/13/12 1313

2. Relinquished By: \_\_\_\_\_

Received By: \_\_\_\_\_

TURNAROUND REQUESTED in Business Days\*  
 OTHER: \_\_\_\_\_

Organic, Metals & Inorganic Analysis

Fuels & Hydrocarbon Analysis

Standard:  10  5  3  2  1  SAME DAY

Specify: \_\_\_\_\_

\* Turnaround request less than standard may incur Rush Charges